**Question 1** **(19 marks)**

Refer to the following table when answering the question.

|  |  |  |
| --- | --- | --- |
| **Profitability ratios** | **Formula** | **Industry average** |
| profit | profit  net sales | 14.00% or 0.14:1 |
| gross profit | gross profit  net sales | 35.00% or 0.35:1 |
| expense | operating expenses  net sales | 21.00% or 0.21:1 |
| rate of return on assets | profit  average total assets | 200.00% or 2.0:1 |

An extract from the income statement of Gravity Enterprises for the year ended 30 June 2022 revealed the following:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Gravity Enterprises Income statement (extract) for the year ended 30 June 2022**   |  |  | | --- | --- | |  | $ | | Sales  Gross profit  Profit/Loss | 250,000  60,000  (10,500) | |

**Note:** Total assets at 1 July 2021 = $28,000 and at 30 June 2022 = $40,000

1. The table above provides industry average figures for profitability ratios. Calculate the four profitability ratios for Gravity Enterprises. Round to two decimal places. (11 marks)

|  |  |  |
| --- | --- | --- |
| profit |  |  |
| gross profit |  |  |
| expense |  |  |
| rate of return on assets |  |  |

b) Comment on your findings. (8 marks)

**Question 2** **(11 marks)**

Refer to the following table when answering the question.

|  |  |
| --- | --- |
| **Ratio** | **Formula** |
| debt to equity | total liabilities  total equity |
| working capital | current assets  current liabilities |
| quick asset | current assets – inventory and prepayments  current liabilities – bank overdraft |
| profit | profit  net sales |

Given the following extract of ledger account balances for Levitation Industries, you are required to identify and calculate the liquidity ratios only. Round to two decimal places.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Cash at bank | $12,000 | Accounts payable | $1,900 | Accounts receivable | $2,750 |
| Capital | $16,900 | Sales (net) | $150,000 | Cost of sales | $74,000 |
| Equipment | $36,000 | Inventory | $29,450 | Accrued wages | $16,000 |
| Prepaid insurance | $3,400 | Bad debts | $190 | Loan (due 5 months) | $11,000 |
| Mortgage (due 5 years) | $190,000 | Stationery expense | $800 | Drawings | $6,000 |

**Workings:**

**Question 1** **(19 marks)**

a) Calculate the four profitability ratios for Gravity Enterprises. Round to two decimal places.

(11 marks)

|  |  |  |
| --- | --- | --- |
| **Description** | | **Marks** |
| **Ratio** | **Calculations** |  |
| profit | (10,500) (1)  250,000 (1)  = -0.04:1 or -4.20% | 2 |
| gross profit | 60,000 (1)  250,000 (1)  = 0.24:1 or 24.00% | 2 |
| expense | 60,000 (1) – (10,500) (1) = 70,500  70,500  250,000 (1)  = 0.28:1 or 28.20% | 3 |
| rate of return on assets | [28,000 (1) + 40,000 (1)] / 2 (1) = 34,000  (10,500) (1)  34,000  = -0.31:1 or -30.88% | 4 |
| **Total** | | **/11** |
| **Note:** Workings do not have to be shown, i.e. award full marks if ratios are correct without workings  **Deduct** 1 mark for incorrect calculations to a maximum of 2  **Deduct** 1 mark if profit and/or rate of return ratios are not indicated as negative results to a maximum of 1 | | |

1. Comment on your findings. (8 marks)

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Extracts and applies relevant and justified information in findings | 7–8 |
| Extracts and applies mostly relevant and clear information in findings | 5–6 |
| Extracts and applies some relevant information in findings | 3–4 |
| Provides minimal information in findings | 1–2 |
| **Total** | **/8** |
| **Answer could include, but is not limited to** | |
| Gravity Enterprise’s profitability indicators are significantly below that of the industry averages for the given period of time, with the business actually reporting a loss for the period, not a profit.  The profit ratio of Gravity Enterprises is 18.2% less than the industry average.  This is in part due to the higher expense ratio of 28.2% of the business compared to the industry average of 21%. This may indicate that the business does not have an adequate level of control over their expenses with operating costs being too high.  The gross profit ratio of the business is also significantly below that of the industry average, 24% compared to 35%. This may be due to low sales and/or high costs associated with sales for the period.  The rate of return on assets for Gravity Enterprises of -30.88% is considerably below the industry average of 200% indicating that the business is not using its assets to generate profits as efficiently or effectively as similar businesses in the industry. The business may have idle assets that it should dispose of or needs to be able to convert its investment in assets into profits more effectively. | |

**Question 2 (11 marks)**

Identify and calculate the liquidity ratios.

|  |  |  |
| --- | --- | --- |
| **Description** | | **Marks** |
| **Liquidity ratio** | **Calculations** |  |
| Working capital | CA = 12,000 (1) + 2,750 (1) + 29,450 (1) + 3,400 (1) = 47,600  CL = 1,900 (1) + 16,000 (1) + 11,000 (1) = 28,900  47,600  28,900  = 1.65:1 or 164.71% | 7 |
| Quick asset | CA – inventory and prepayments = 47,600 (1) – 29,450 (1) – 3,400 (1) = 14,750  CL – bank overdraft = 28,900 – 0 = 28,900 (1)  14,750  28,900  = 0.51:1 or 51.04% | 4 |
| **Total** | | **/11** |
| **Note:** Workings do not have to be shown, i.e. award full marks if ratios are correct without workings  **Deduct** 1 mark for incorrect calculations to a maximum of 2  **Deduct** 1 mark for each foreign item included in calculations to a maximum of 2 | | |